

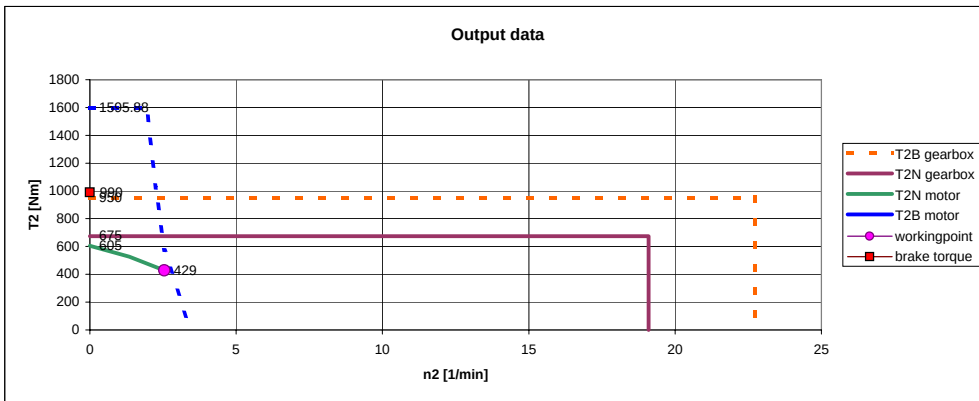
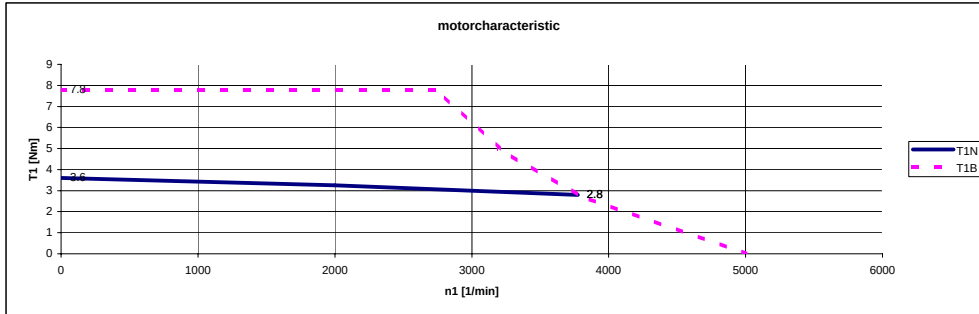


Datasheet

TPM 050A
Characteristic
i=
130-15
220

-

320

Lubrication: Oil Renolin PG 220
0606
Theoretical 48 Vdc


Terminal Voltage	U _{KI} [V]	48	
Number of poles		12	-poles
Motor torque constant	K _t [Nm/A]	0.58	(2-phases, peak)
Voltage constant	K _e [V _{rms} /1000 rpm]	42.95	
Ambient Temperature	Teta u [°C]	40	
Max. Winding Temperature	Teta max [°C]	140	
Heat Transmission Resistance	R _{th} [K/W]	0.81	
Max. Torque	M _{max} [Nm]	7.8	
Max. Current	I _{max} [Arms]	19.6	1)
Continuous Stall Torque	M ₀ [Nm]	3.6	
Continuous Current	I ₀ [Arms]	5.2	
No-Load Speed	n ₀ [1/min]	5000	
Nominal Speed	n _n [1/min]	3775	
Nominal Torque	M _n [Nm]	2.8	
Nominal Current	I _n [Arms]	4.2	1)
Terminal Resistance	R _{tt} [Ohm]	2.10 +/- 7 %	
Terminal Inductance	L _{tt} [mH]	6.10 +/- 20 %	
Electrical Time Constant	Tau [ms]	2.90 +/- 27 %	

Output data:		TPM 050A	i = 220
Nominal torque at the output	T _{2N}	2)	429 [Nm]
max. torque at the output	T _{2max}		950 [Nm]
Continuous stall torque at the output	T ₀		605 [Nm]
Max. speed	n _{2max}		3.5 [1/min]
Brake torque	T _{brake}		990.0 [Nm]
			(static brake, optional)
max. motor torque	T _{1max}		4.6 [Nm]
			limited by gearbox
Max. current	I _{max}		9.9 [Aeff]
max. tolerated nominal current	I _{n zul}		5.2 [Aeff]
Nom. motor Power	P _N		0.1 [KW]
Max. motor Power	P _{N max}		1.1 [KW]
Brake voltage	U _{br}		24 [V]
			(optional)
Inertia without brake	J _{IOH}		2.31 [kgcm²]
Inertia with brake	J _{IBP}		2.54 [kgcm²]
			Input side
			Input side

1) In dependence to the used gearbox it's possible that the max. current must be limited !
 2) depending on the max. temperature of the feedback system the max. values could be limited

The tolerance for torque, current, speed could be +/- 10%. All temperature information is based on the insulation class F. Mmax could be limited by the the gearbox or the max. current to the motor

watercooling: no